

Appl. No. 10/798,299

Reply to Office Action of: May 5, 2006

REMARKS

Applicant wishes to thank the Examiner for reviewing the present application.

Claim Amendments

Claim 21 is amended inserting "a chamber in" between "in" and "a scanner" on line 2 and inserting "by imaging the portion positioned in the chamber" following "manner on line 3. These amendment are made to clarify the positioning of the patient in the scanner. No new subject matter is believed to have been added by way of these amendments.

Claim Rejections

Claims 1, 3, 4 and 21 have been rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,058,323 to Lemelson (Lemelson). Applicants respectfully traverses the rejections as follows.

Regarding Claims 1, 3 and 4

Lemelson teaches an imaging system that includes a moveable table (22) that uses multiple clamping devices to secure the patient to the top of the table. The table can be positioned between a pair of rails on an imaging support having an imaging machine that is slidable along the rails and over the patient (see Figure 2).

Claim 1 reads as follows:

1. A medical imaging system comprising a patient support surface; and an imaging apparatus, said imaging apparatus having a chamber to receive a portion of a patient to be imaged, and a support table located within said support surface, said support table having an aperture to permit positioning of said portion in said chamber and being adjustable relative to said support surface to be located above said surface and thereby engage said portion of said patient to be imaged.

The Examiner believes that Lemelson teaches every feature recited in claim 1, although

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has not provided any indication as to what feature in Lemelson corresponds to which feature recited in the claim. Applicants believe that the Examiner has not fully considered each feature in claim 1 and how they are interrelated. For instance, it is assumed that the Examiner has equated the slidable imaging machine (40) shown in Figure 2 to the recited "imaging apparatus" in claim 1. According to this logic, then the claimed "chamber" would be considered the interior circular region that surrounds the patient when they are wheeled between the rails. For the chamber to be "adjustable relative to said support surface" then the support having the rails would be considered the claimed "support surface". Consequently, the only equivalent for a "support table" is the table (22) shown in Figure 2.

Although this table could be considered to be "located within the support surface" when the patient is wheeled under the imaging machine, the table (22) clearly does not have an aperture to permit positioning of the portion of the patient as required by claim 1. In fact, the table provides a continuous surface with no openings whatsoever.

Claim 1 also requires that the support table be adjustable relative to the surface so that it is located above the surface to then engage the patient. In fact, for the sake of argument, even if the table (22) were adjustable vertically (which Applicants stress is not their position) such adjustment would not thereafter engage the patient since the patient is already fixed to the table (22).

Therefore, Applicants submit that Lemelson clearly does not teach a support surface and support table that are operable with each other as recited in claim 1 and thus cannot anticipate.

Claims 3 and 4 being ultimately dependent on claim 1 are therefore also believed to distinguish over Lemelson.

Regarding Claim 21

Claim 21 has been amended to emphasize how the patient is positioned for repeatable scanning. As discussed in detail above, the equivalent to the claimed "chamber" can only reasonably be considered the circular region that surrounds the patient when the table (22) is moved into position. Applicants submit that Lemelson clearly does not teach every step in claim 21. For instance, claim 21 requires that the portion of the patient is located in the chamber in a predetermined position using an adjustment mechanism. As noted above, Lemelson teaches an adjustment device that positions the patient securely on the table. Therefore, in Lemelson, the

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patient is located on the table in a repeatable manner and not in the chamber. There is no disclosure in Lemelson that teaches placing the patient in the chamber using an adjustment mechanism. Applicants believe that the Examiner has again not fully considered the interrelationships between the features recited in claim 21. Accordingly, Applicant submit that Lemelson does not teach every element of claim 21 and thus cannot anticipate.

Claims 5-20 have been rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,964,296 to Matzuk (Matzuk). Applicants respectfully traverse the rejections as follows.

Matzuk teaches several embodiments of an ultrasound scanning device. The Examiner relies specifically on a passage that is believed to refer to the device shown in Figure 46. Figure 46 (and the passages describing the figure) describes a rotating drum that is used to rotate transducers supported by the drum. As clearly stated in col. 36, lines 25-28 (and col. 4, line 24), the drum is enclosed in a sealed housing. The seal is required to retain an acoustically conductive liquid. Claim 5, in part, requires: "a drum rotating on said base for receiving a portion of a patient to be imaged...". Although Matzuk teaches a rotating drum, the drum is actually unable to receive a portion of the patient but rather is sealed to retain fluid. Clearly, the drum of Matzuk is not the same as the drum recited in claim 5.

Furthermore, claim 5 requires "a transducer head rotating with said drum and displaced relative to said drum along an axis parallel to the axis of rotation...". Referring to Figure 46 and col. 36, lines 58-62, the drum 1070 includes an array of transducers 1108 that are spaced parallel to the axis of rotation and are fixed on the circumference of the drum. Therefore, the transducers shown in Matzuk are not displaceable relative to the drum but are in fact fixed relative to the drum. Moreover, there is in fact no need to have the transducers move in an axial direction since the transducers span the entire axial length of the drum. Clearly, Matzuk does not teach a transducer head as recited in claim 5.

Accordingly, Matzuk does not teach every feature of claim 5 (in fact does not teach several features) and thus cannot anticipate.

Claims 6-20 are ultimately dependent on claim 5 and therefore are also believed to be distinguished over Matzuk.

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Summary

It is respectfully submitted that 1) Lemelson does not teach a support surface and support table that interact as recited in claims 1, 3-4 and 21 and thus cannot anticipate such claims; and 2) Matzuk does not teach a chamber that receives a portion of a patient or a transducer head moveable relative to a drum in an axial direction and thus cannot anticipate claim 21.

Therefore, Applicant respectfully submits that all rejections have been successfully traversed and all pending claims, namely claims 1 and 3-21 are in condition for allowance.

Applicant requests early reconsideration and allowance of the present application.

Respectfully submitted,



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